

Southern Utah University
Department of Physical Science
Report of Assessment Plans for 2001-2002

In the space below, please indicate the department's success in implementing its assessment plan for 2001-2002. Please report the results by June 3, 2002. Should you have questions, please contact the Associate Provost's Office at 586-7706.

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May, 23, 2002

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Assessment Criteria and Activities

Entire Department

1. In the engineering area, each student will be required to pass the Fundamentals of Engineering exam.

Was this assessment criterion implemented? yes no

Was this assessment criterion achieved? yes no

What were the results?

How will the results be used to improve the curriculum and/or pedagogy of the program?

2. In the physics area, high performance in the MCAT will be expected for those students who take the exam.

Was this assessment criterion implemented? yes no

Was this assessment criterion achieved? yes no

What were the results?

Discussion:

The Physical Sciences results encompass, Physical Chemistry, Organic Chemistry, and Physics. The physical sciences results are around the 50th percentile. These results lag behind the corresponding results in the biological sciences. While the results in the biological sciences increased significantly in the above period, those in the physical sciences slipped slightly in the same period.

The above results are for a relatively small time span. We will watch carefully to see if these results are changed over time.

As department chair, I will communicate these results to our division heads and we will discuss strategies for improvement. Some possible strategies are:

1. Analyze the questions contained in the MCAT to discover the areas of greater concentration, and also to discover the types and style of questions asked. Use this information in teaching the course. Include more MCAT style questions in course exams.
2. Offer MCAT review sessions just before the spring MCAT test.

The average results for SUU students are:

Year	Verbal (percentile)	Physical Sciences (percentile)	Writing Sample (percentile)	Biological Sciences (percentile)
1999	8.1 (42-57)	8.3 (42-60)	O (50 th)	9.2 (47-65)
2001	8.3 (42-56)	8.0 (41-59)	O (50 th)	9.8 (59-71)

How will the results be used to improve the curriculum and/or pedagogy of the program?

3. In the chemistry area, students will compare well on nationally normed tests.

Was this assessment criterion implemented?

yes

Was this assessment criterion achieved?

Unknown

What were the results?

In several instances, the American Chemical Society has not finished grading and normalizing all exams submitted. We do have the following results:

General Chemistry classes scored between 50th and the 54th percentiles on the nationally standardized American Chemical Society General Chemistry Exam.

Organic& Biochemistry class scored in the 60th percentile on the nationally standardized American Chemical Society Organic& Biochemistry Exam.

Organic Chemistry class scored in the 80th percentile on the nationally standardized American Chemical Society Organic Chemistry Exam

Analytical Chemistry class scored in the 77th percentile on the nationally standardized American Chemical Society Analytical Chemistry Exam

How will the results be used to improve the curriculum and/or pedagogy of the program?

In any class that performs below national standards the educator will review and make the needed revisions so the criterion is achieved.

4. In all areas, alumni will be tracked and surveyed. Results of these surveys will be examined for program performance and improvement.

Was this assessment criterion implemented? no

Was this assessment criterion achieved? no

What were the results?

In the new Integrated Engineering program, we have not yet had any graduates.

In Chemistry, no release time or monies have been allocated for faculty or staff to conduct such pedagogical studies.

In Geology, no release time or monies have been allocated for faculty or staff to conduct such tracking activities. However, once a survey vehicle is designed, it should be a fairly simple to conduct the survey.

How will the results be used to improve the curriculum and/or pedagogy of the program?

Once you submit your report, it will be electronically mailed to the Associate Provost's Office. It will also appear in a new web documents that will be posted to the University's web site. You should print this page as your hard copy.

The Associate Provost will compile assessment reports for the Provost and for the University's assessment program.

Should the department wish to make any changes in the report for 2001-2002, feel free to write on a paper copy and forward any changes to the Associate Provost's Office by September 9, 2002.